

Title (en)

FILTER ARRANGEMENT FOR FUEL INJECTION SYSTEMS

Title (de)

FILTERANORDNUNG FÜR KRAFTSTOFFEINSPRITZSYSTEME

Title (fr)

DISPOSITIF DE FILTRATION POUR SYSTEMES D'INJECTION DE CARBURANT

Publication

EP 1554489 A1 20050720 (DE)

Application

EP 03808664 A 20030630

Priority

- DE 0302173 W 20030630
- DE 10247210 A 20021010

Abstract (en)

[origin: WO2004036030A1] The invention relates to a fuel injection device (1) for internal combustion engines comprising a fuel injector (26) that can be impinged upon by a high-pressure fuel source (2, 43). Said fuel injection device (1) is provided with a pressure booster (13) comprising a movable piston-type booster element (14) which separates a working chamber (15) that can be connected to the high-pressure source (2, 43) via a high-pressure conduit (3) from a high-pressure chamber (17) impinging the fuel injector (26). The fuel pressure of a high-pressure chamber (17) can be modified by filling a rear chamber (16) of the pressure booster (13) with fuel and discharging fuel from said rear chamber (16). A filter element (5) is accommodated within a conduit section (4) that branches off the high-pressure conduit (3), and is mounted upstream of flow connections (10, 20, 23; 42, 44) which are used for filling pressure chambers (16, 17) of the pressure booster (13).

IPC 1-7

F02M 57/02; F02M 59/10; F02M 47/02

IPC 8 full level

F02M 47/02 (2006.01); **F02M 57/02** (2006.01); **F02M 59/10** (2006.01); **F02M 61/16** (2006.01); **F02M 63/00** (2006.01)

CPC (source: EP US)

F02M 47/027 (2013.01 - EP US); **F02M 57/025** (2013.01 - EP US); **F02M 59/105** (2013.01 - EP US); **F02M 61/165** (2013.01 - EP US);
F02M 63/0015 (2013.01 - EP US); **F02M 63/0043** (2013.01 - EP US)

Citation (search report)

See references of WO 2004036030A1

Designated contracting state (EPC)

DE FR IT

DOCDB simple family (publication)

WO 2004036030 A1 20040429; DE 10247210 A1 20040422; DE 50310480 D1 20081023; EP 1554489 A1 20050720; EP 1554489 B1 20080910;
JP 2006503206 A 20060126; US 2006005815 A1 20060112; US 7093582 B2 20060822

DOCDB simple family (application)

DE 0302173 W 20030630; DE 10247210 A 20021010; DE 50310480 T 20030630; EP 03808664 A 20030630; JP 2004543927 A 20030630;
US 52758205 A 20050314